

5 SEQUENCE LISTING

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15 <120> METHODS AND COMPOUNDS FOR MODULATING NUCLEAR RECEPTOR  
COACTIVATOR BINDING

20 <130> UCAL-253/01US

25 <140>  
<141>

30 <150> US 60/079,956  
<151> 1998-03-30

35 <160> 51

40 <170> PatentIn Ver. 2.0

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1 5

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5 1 5

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25 Ala Ser

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20 25 30  
Thr Ala  
35  
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Glu Pro Ala Ser Pro Lys Lys Lys Glu Asn Ala Leu Leu Arg Tyr Leu  
1 5 10 15  
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20 25 30  
  
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Ala Asp Gly Gln Ser Arg Leu His Asp Ser Lys Gly Gln Thr Lys Leu  
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20 25 30  
Ala Ser  
  
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Ser Gly Ser Thr His Gly Thr Ser Leu Lys Glu Lys His Lys Ile Leu  
1 5 10 15

His Arg Leu Leu Gln Asp Ser Ser Ser Pro Val Asp Leu Ala Lys Leu  
20 25 30

15 Thr Ala

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25 <400> 10  
Glu Pro Val Ser Pro Lys Lys Glu Asn Ala Leu Leu Arg Tyr Leu  
1 5 10 15

Leu Asp Lys Asp Asp Thr Lys Asp Ile Gly Leu Pro Glu Ile Thr  
20 25 30

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1 5 10 15

40 Leu Gln Leu Leu Thr Thr Lys Ser Glu Gln Met Glu Pro Ser Pro Leu  
20 25 30

45 Pro Ser

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Pro Gly Ser Thr His Gly Thr Ser Leu Lys Glu Lys His Lys Ile Leu  
1 5 10 15

His Arg Leu Leu Gln Asp Ser Ser Ser Pro Val Asp Leu Ala Lys Leu  
20 25 30

60 Thr Ala

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1 5 10 15

10 Leu Asp Lys Asp Asp Thr Lys Asp Ile Gly Leu Pro Ser Ile Thr  
20 25 30

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20 <400> 14  
Ala Glu Asn Gln Arg Gly Pro Leu Glu Ser Lys Gly His Lys Lys Leu  
1 5 10 15

Leu Gln Leu Leu Thr Cys Ser Ser Glu Asp Arg Gly His Ser Ser Leu  
20 25 30

25 Thr Asn

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35 <400> 15  
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1 5 10 15

40 His Lys Leu Leu Gln Asn Gly Asn Ser Pro Ala Glu Val Ala Lys Ile  
20 25 30

Thr Ala

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Glu Gln Leu Ser Pro Lys Lys Lys Glu Asn Asn Ala Leu Leu Arg Tyr  
1 5 10 15

55 Leu Leu Asp Arg Asp Asp Pro Ser Asp Val Leu Ala Lys Lys Leu Gln  
20 25 30

60

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1 5 10 15

Leu Gln Leu Leu Thr Cys Ser Ser Asp Asp Arg Gly His Ser Ser Leu  
20 25 30

10 Thr Asn

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25 His Lys Leu Leu Gln Asn Gly Asn Ser Pro Ala Glu Val Ala Lys Ile  
20 25 30

Thr Ala

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35 <400> 19  
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1 5 10 15

40 Leu Leu Asp Arg Asp Asp Pro Ser Asp Ala Leu Ser Lys Glu Leu Gln  
20 25 30

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50 <213> Homo sapiens

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Ser Glu Thr Pro Arg Gly Pro Leu Glu Ser Lys Gly His Lys Lys Leu  
1 5 10 15

55 Leu Gln Leu Leu Thr Cys Ser Ser Glu Asp Arg Gly His Ser Ser Leu  
20 25 30

60 Thr Asn

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1 5 10 15

10 His Lys Leu Leu Gln Asn Gly Asn Ser Pro Ala Glu Val Ala Lys Ile  
20 25 30

Thr Ala

15

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20 <400> 22  
Glu Gln Leu Ser Pro Lys Lys Glu Asn Asn Ala Leu Leu Arg Tyr  
1 5 10 15

25 Leu Leu Asp Arg Asp Asp Pro Ser Asp Ala Leu Ser Lys Glu Leu Gln  
20 25 30

30

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35 <400> 23  
Ser Glu Gly Asp Ser Lys Tyr Ser Gln Thr Ser His Lys Leu Val Gln  
1 5 10 15

40 Leu Leu Thr Thr Ala Glu Gln Gln Leu Arg His Ala Asp Ile Asp  
20 25 30

45

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50 <400> 24  
Thr Cys Pro Ser Ser His Ser Ser Leu Thr Glu Arg His Lys Ile Leu  
1 5 10 15

55 His Arg Leu Leu Gln Glu Gly Ser Pro Ser Asp Ile Thr Thr Leu Ser  
20 25 30

60 val

65 <210> 25  
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Glu Leu Asp Ala Ala Lys Lys Lys Glu Ser Lys Asp His Gln Leu Leu  
1 5 10 15

10 Arg Tyr Leu Leu Asp Lys Asp Glu Lys Asp Leu Arg Ser Thr Pro Asn  
20 25 30

Leu Cys

15

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25 <223> negatively charged amino acid

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30 <223> hydrophobic amino acid

<220>  
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35 <223> negatively charged amino acid

<400> 26

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser Xaa Xaa Xaa Xaa Lys Leu  
1 5 10 15

40 Xaa Gln Leu Leu Thr Xaa  
20 25 30

Xaa Xaa

45

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<213> Homo sapiens

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55 <223> positively charged amino acid

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60 <223> positively charged amino acid

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65 <223> positively charged amino acid

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   <223> negatively charged amino acid

10   <220>  
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   <222> (29)  
   <223> hydrophobic amino acid

15   <220>  
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   <222> (32)  
   <223> hydrophobic amino acid

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   Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Xaa Glu Xaa His Xaa Ile Leu  
   1                    5                    10                    15

25   His Xaa Leu Leu Gln Xaa Xaa Xaa Ser Pro Xaa Xaa Xaa Xaa Xaa Xaa  
   20                    25                    30

30   Xaa Xaa

35   <210> 28  
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   <222> (24)  
   <223> negatively charged amino acid

50   <220>  
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   <222> (33)  
   <223> hydrophobic amino acid

55   <400> 28  
   Glu Xaa Xaa Xaa Xaa Lys Lys Lys Glu Xaa Xaa Xaa Xaa Xaa Leu Leu  
   1                    5                    10                    15

60   Arg Tyr Leu Leu Asp Xaa Asp Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

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  <400> 29

5 Thr Ser Leu Lys Glu Lys His Lys Leu Leu Arg Tyr Leu Leu Gln Asp  
1 5 10 15

Ser Ser

10

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25 <223> Val --> Arg (V284R)

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30 <223> Asp --> Ala (D285A)

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35 <223> Lys --> Ala (K288A)

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40 <223> Cys --> Arg (C298R)

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50 <223> Lys --> Ala (K306A)

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1 5 10 15  
55 Phe Cys Glu Leu Pro Cys Glu Asp Gln Ile Ile Leu Leu Lys Gly Cys  
20 25 30

Cys

60

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      <223> Leu --> Arg (L454R)

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      <223> Leu --> Arg (L456R)

15      <220>  
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      <223> Glu --> Lys (E457K)

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25      <210> 32  
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30      <400> 32  
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          1               5               10               15

35      Phe Ser Glu Leu Pro Cys Glu Asp Gln Ile Ile Leu Leu Lys Gly Cys  
          20               25               30

40      Cys

45      <210> 33  
      <211> 12  
      <212> PRT  
      <213> Homo sapiens

50      <400> 33  
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          1               5               10

55      <210> 34  
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      <213> Homo sapiens

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65      Phe Thr Gly Leu Ser Ile Ala Asp Gln Ile Thr Leu Leu Lys Ala Ala  
          20               25               30

70      Cys

75      <210> 35

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<213> Homo sapiens

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Phe Ser Glu Leu Pro Leu Asp Asp Gln Val Ile Leu Leu Lys Ala Gly  
20 25 30

25 Trp

30 <210> 37  
<211> 12  
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<213> Homo sapiens

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Val Glu Ala Val Gln Glu Ile Thr Glu Tyr Ala Lys Asn Ile Pro Gly  
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50 Phe Ile Asn Leu Asp Leu Asn Asp Gln Val Thr Leu Leu Lys Tyr Gly  
20 25 30

Val

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65 <210> 40  
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10 <400> 40  
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Phe Arg Asp Leu Thr Ser Glu Asp Gln Ile Val Leu Leu Lys Ser Ser  
20 25 30

15 Ala

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<223> Lys --> Ala (K362A)

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Phe Val Asp Leu Thr Leu His Asp Gln Val His Leu Leu Glu Cys Ala  
20 25 30

50 Trp

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<223> Glu --> Lys (E542K)

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10 <213> Homo sapiens

<400> 44

Gly Arg Gln Val Ile Ala Ala Val Lys Trp Ala Lys Ala Ile Pro Gly  
1 5 10 15

15 Phe Arg Asn Leu His Leu Asp Asp Gln Met Thr Leu Leu Gln Tyr Ser  
20 25 30

Trp

20

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<213> Homo sapiens

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Glu Phe Pro Glu Met Leu Ala Glu Ile Ile Thr Asn  
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<210> 46

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35 <212> PRT

<213> Homo sapiens

<400> 46

Glu Arg Gln Leu Leu Ser Val Val Lys Trp Ser Lys Ser Leu Pro Gly  
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Phe Arg Asn Leu His Ile Asp Asp Gln Ile Thr Leu Ile Gln Tyr Ser  
20 25 30

45 Trp

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<400> 47

Glu Phe Pro Glu Met Met Ser Glu Val Ile Ala Ala  
55 1 5 10

<210> 48

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<213> Homo sapiens

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Gly Lys Gln Met Ile Gln Val Val Lys Trp Ala Lys Val Leu Pro Gly  
65 1 5 10 15

5 Phe Lys Asn Leu Pro Leu Glu Asp Gln Ile Thr Leu Ile Gln Tyr Ser  
20 25 30

Trp

10

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Glu Phe Pro Ala Met Leu Val Glu Ile Ile Ser Asp  
1 5 10

20

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25 <213> Homo sapiens

<400> 50

Glu Arg Gln Leu Val His Val Val Lys Trp Ala Lys Ala Leu Pro Gly  
1 5 10 15

30

Phe Arg Asn Leu His Val Asp Asp Gln Met Ala Val Ile Gln Tyr Ser  
20 25 30

Trp

35

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40 <213> Homo sapiens

<400> 51

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50